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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/716,440	11/21/2000	Lars-Goran Petersen	2380-287	8213

7590 01/11/2005

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EXAMINER

NGUYEN, HANH N

ART UNIT	PAPER NUMBER
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2662

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/716,440

Applicant(s)

PETERSEN ET AL.

Examiner

Hanh Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-105 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 10, 11, 14-25, 28, 31-41, 44, 45, 48-55, 58, 61-70, 73, 74, 77-84, 87, 90-96 and 102-105 is/are rejected.
- 7) ☒ Claim(s) 8, 9, 12, 13, 26, 27, 29, 30, 42, 43, 46, 47, 56, 57, 59, 60, 71, 72, 75, 76, 85, 86, 88, 89 and 97-101 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAIL ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 10,11, 14-25, 28, 31-41, 44, 45, 48-55, 58, 61-70, 73, 74, 77-84, 87, 90-96, and 102-105 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cave (6,266,343 B1) in view of Sasson et al. (US 6,728,261 B1).

Regarding claims 1, 31, 36, 61, 65, 90 and 94, Cave discloses, in Fig.5, segmenting a frame of user data (cell stream, col.3, lines 50-55) for transport by AAL2 packets, AAL2 packets being packets of ATM Adaptation layer 2, ATM Mode (AAL2 network 34, fig.1), each of the AAL2 packets having a header which includes a length indicator field (LI field, see col.3, lines 40-45) See col.4, lines 55-67; using a predetermined value (sequence number contained in header, see col.4, lines 62-67) in the length indicator field in a header (LI field) of one of the AAL2 packets to indicate the frame (cell stream) is transported by plural AAL2 packets. Cave does not disclose using one or more Internet protocol packets to transport the AAL2 packets. Sasson et al. discloses ATM packets are transmitted over IP by encapsulating (fig.6, steps 670,680,690 and fig.8). Therefore, it would have been obvious to one ordinary skilled in the art to transmit AAL2 packets of Cave over IP network as suggested by Sasson et al. in order to assign segmented AAL2 packets to users.

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In claims 23, 53, and 82, Cave discloses substantially subjected matters disclosed in claim 1, except that Cave does not expressly disclose not including a LI value in the very last of AAL2 packets. However, it would have been obvious to not include this value in the last value. As expressed already, one would have been motivated to do this because it would save on overhead in the packet. The purpose of the value in the LI fields is to indicate if information from a particular frame will be found in plural AAL2 packets. The last packet carrying information from a particular frame will obviously indicate that there is no additional information beyond it because it is the last one, so there is no need to have the LI field containing this obvious information.

Regarding claims 2, 10, 28, 37, 44, 58, 66, 73, 87, and 95, Cave discloses the predetermined value is a sequence number (see claim 1, col.4, lines 62-67) (predetermined value has a range corresponding to a sequence number).

Regarding claims 3, 4, 11, 19, 24, 34, 38, 45, 54, 67, 74, 83, and 96, Cave discloses the range comprises numbers which are greater than a maximum number of octets (48octets) in a standard AAL2 packets. See col.5, lines 8-15.

Regarding claims 5, 6, 25, 39, 40, 55, 68, 69, and 84, as mentioned previously in claim 3, Cave discloses the range is at least one value between 48-63 (see col.5, lines 10-15)

Regarding claims 7, 14, 41, and 70, as mentioned previously, Cave discloses modulo division of the predetermined value provides the sequence number (see col.4, lines 62-67).

Regarding claims 15, 42, 48, 71, and 77, as mentioned previously, Cave discloses that AAL2 packets having predetermined end of user data packet value in its UUI field of its header

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(see claim 1). Therefore, it would have been obvious for a last packet having a predetermined end of user data packet value in its UUI field of its header.

Regarding claims 16, 17, 21, 32, 49, 50, 62, 78, 79, 91, 102, and 103, the limitations of these claims have been addressed in claim 31.

Regarding claims 18, 33, 22, 51, 63, 80, 92, and 104, neither Cave nor Sasson et al. expressly discloses where the predetermined value is 46, but it would have been obvious to set the value at 46. One would have been motivated to do this because it is a matter design choice to select whatever value that the designer wants.

Regarding claims 20, 35, 52, 64, 81, 93, and 105, Cave discloses that the UUI field in header comprises sequence number (see col.4, lines 62-67).

Regarding claims 12, 13, 29, 30, 46, 47, 59, 60, 75, 76, 88, 89, 99, 100, and 101, neither Silverman nor Lyons et al. expressly discloses making the first range from 47 to 55 and the second range from 56 to 93. However, it would have been obvious to split it into two regions in this fashion. One would have been motivated to do this because having two ranges allows for more flexibility when it comes to sequencing the numbers. One could either use the first range or the second range in the sequencing operation.

Allowable Subject Matter

Claims 8-9, 12, 13, 26, 27, 29, 30, 42, 43, 46, 47, 56, 57, 59, 60, 71, 72, 75, 76, 85, 86, 88, 89 and 97-101 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments with respect to claims 1-7, 10, 11, 14-25, 28, 31-41, 44, 45, 48-55, 58, 61-70, 73, 74, 77-84, 87, 90-96 and 102-105 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Silverman (Pat.6731649 B1) discloses TDM over IP Emulation Service.

Lyons et al.(Pat.6075798) discloses Extended Header for Use in ATM Adaptation Layer Type 2 Packets.

Bruecheimer et al.(Pat. 6,574,224 B1) discloses Processing Communication Traffic.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Nguyen whose telephone number is 571 272 3092. The examiner can normally be reached on Monday-Friday from 8AM to 5PM. The examiner can also be reached on alternate


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou, can be reached on 571 272 3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

January 6, 2005

A handwritten signature in black ink, appearing to read 'H. Nguyen'.

HANH NGUYEN
PRIMARY EXAMINER